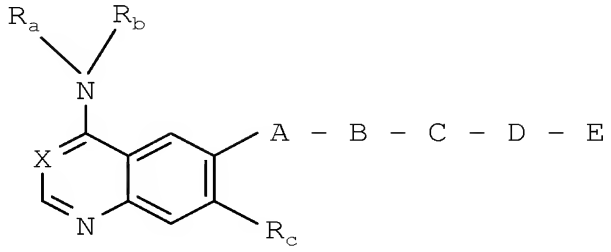
CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-13 (canceled)

Claim 14 (previously presented) A quinazoline compound of formula



, (I)

wherein

R_a denotes a hydrogen atom or a C_{1-4}-alkyl group,

R_b denotes a phenyl, benzyl or 1-phenylethyl group wherein the phenyl nucleus is substituted in each case by the groups R_1 to R_3, whilst

R_1 and R_2, which may be identical or different, in each case denote a hydrogen, fluorine, chlorine, bromine or iodine atom,

a C_{1-4}-alkyl, hydroxy, C_{1-4}-alkoxy, C_{3-6}-cycloalkyl, C_{4-6}-cycloalkoxy, C_{2-5}-alkenyl or C_{2-5}-alkynyl group,

an aryl, aryloxy, arylmethyl or arylmethoxy group,

a C_{3-5}-alkenyloxy or C_{3-5}-alkynyloxy group, whilst the unsaturated moiety may not be linked to the oxygen atom,

a C_{1-4}-alkylsulfenyl, C_{1-4}-alkylsulfinyl, C_{1-4}-alkylsulfonyl, C_{1-4}-alkylsulfonyloxy, trifluoromethylsulfenyl, trifluoromethylsulfinyl or trifluoromethylsulfonyl group,

a methyl or methoxy group substituted by 1 to 3 fluorine atoms,

an ethyl or ethoxy group substituted by 1 to 5 fluorine atoms,

a cyano or nitro group or an amino group optionally substituted by one or two C_{1-4}-alkyl groups, wherein the substituents may be identical or different, or

R_1 together with R_2, if they are bound to adjacent carbon atoms, denote a -CH=CH-CH=CH group and

R_3 denotes a hydrogen, fluorine, chlorine or bromine atom,

a C_{1-4}-alkyl, trifluoromethyl or C_{1-4}-alkoxy group,

X denotes a nitrogen atom,

A denotes an imino group optionally substituted by a C_{1-4}-alkyl group,

B denotes a carbonyl group,

C denotes a -CH=C=CH-, >C=CH_2 or -CH=CH- group which may be substituted in each case by one or two methyl groups or by a trifluoromethyl group,

an -C≡C- group or

a -CH=CH-CH=CH- group optionally substituted by 1 to 4 methyl groups or by a trifluoromethyl group,

D denotes an alkylene group wherein the alkylene moiety contains 1 to 8 carbon atoms and additionally 1 to 4 hydrogen atoms in the alkylene moiety may be replaced by fluorine atoms,

E denotes an amino, C_{1-4}-alkylamino or di-(C_{1-4}-alkyl)-amino group wherein the alkyl moieties may be identical or different,

a C_{2-4}-alkylamino group wherein the alkyl moiety is substituted in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, whilst

R_5 denotes a hydroxy, C_{1-4}-alkoxy, amino, C_{1-4}-alkylamino or di-(C_{1-4}-alkyl)-amino group,

an N-(C_{1-4}-alkyl)-N-(C_{2-4}-alkyl)-amino group wherein the C_{2-4}-alkyl moiety is substituted in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, whilst R_5 is as hereinbefore defined,

a di-(C_{2-4}-alkyl)-amino group wherein the two C_{2-4}-alkyl moieties are substituted in each case in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, whilst the substituents may be identical or different and R_5 is as hereinbefore defined,

a C_{3-7}-cycloalkylamino or C_{3-7}-cycloalkyl-C_{1-3}-alkylamino group wherein in each case the nitrogen atom may be substituted by a further C_{1-4}-alkyl group,

R_c denotes a C_{4-7}-cycloalkoxy or C_{3-7}-cycloalkyl-C_{1-6}-alkoxy group wherein the cycloalkyl moiety in each case may be substituted by a C_{1-3}-alkyl, hydroxy, C_{1-4}-alkoxy, amino, C_{1-4}-alkylamino, di-(C_{1-4}-alkyl)-amino, hydroxy-C_{1-2}-alkyl, C_{1-4}-alkoxy-C_{1-2}-alkyl, amino-C_{1-2}-alkyl, C_{1-4}-alkylamino-C_{1-2}-alkyl, or di-(C_{1-4}-alkyl)-amino-C_{1-2}-alkyl group, whilst the abovementioned monosubstituted cycloalkyl moieties may additionally be substituted by a C_{1-3}-alkyl group,

whilst

by the aryl moieties mentioned in the definition of the abovementioned groups is meant a phenyl group which in each case may be monosubstituted by R_7, mono-, di- or trisubstituted by R_8 or monosubstituted by R_7 and additionally mono- or disubstituted by R_8, wherein the substituents may be identical or different and

R_7 denotes a cyano, carboxy, C_{1-4}-alkoxycarbonyl, aminocarbonyl, C_{1-4}-alkylaminocarbonyl, di-(C_{1-4}-alkyl)-aminocarbonyl, C_{1-4}-alkylsulfenyl, C_{1-4}-alkylsulfinyl, C_{1-4}-alkylsulfonyl, hydroxy, C_{1-4}-alkylsulfonyloxy, trifluoromethyloxy, nitro, amino, C_{1-4}-alkylamino, di-(C_{1-4}-alkyl)-amino, C_{1-4}-alkyl-carbonylamino, N-(C_{1-4}-alkyl)-C_{1-4}-alkylcarbonylamino, C_{1-4}-alkylsulfonylamino, N-(C_{1-4}-alkyl)-C_{1-4}-alkylsulfonylamino, aminosulfonyl, C_{1-4}-alkylaminosulfonyl or di-(C_{1-4}-alkyl)-aminosulfonyl group, and

R_8 denotes a fluorine, chlorine, bromine or iodine atom, a C_{1-4}-alkyl, trifluoromethyl or C_{1-4}-alkoxy group or

two groups R_8, if they are bound to adjacent carbon atoms, together denote a C_{3-5}-alkylene or 1,3-butadien-1,4-ylene group,

or the tautomers, or stereoisomers or pharmaceutically acceptable salts thereof.

Claim 15 (previously presented) The quinazoline of formula I according to claim 14, wherein

R_a denotes a hydrogen atom,

R_b denotes a phenyl, benzyl or 1-phenylethyl group wherein the phenyl nucleus is substituted in each case by the groups R_1 to R_3, whilst

R_1 and R_2, which may be identical or different, in each case denote a hydrogen, fluorine, chlorine, bromine or iodine atom,

a C_{1-4}-alkyl, hydroxy, C_{1-4}-alkoxy, C_{3-6}-cycloalkyl, C_{4-6}-cycloalkoxy, C_{2-5}-alkenyl or C_{2-5}-alkynyl group,

an aryl, aryloxy, arylmethyl or arylmethoxy group,

a methyl or methoxy group substituted by 1 to 3 fluorine atoms,

a cyano or nitro group and

R_3 denotes a hydrogen, fluorine, chlorine or bromine atom,

a C_{1-4}-alkyl, trifluoromethyl or C_{1-4}-alkoxy group,

X denotes a nitrogen atom,

A denotes an imino group,

B denotes a carbonyl group,

C denotes a -CH=C=CH-, $>C=CH_2$ or -CH=CH- group,

an -C≡C- or -CH=CH-CH=CH- group,

D denotes an alkylene group wherein the alkylene moiety in each case contains 1 to 4 carbon atoms and additionally 1 to 4 hydrogen atoms in the alkylene moiety may be replaced by fluorine atoms,

E denotes a di-(C_{1-4}-alkyl)-amino group wherein the alkyl moieties may be identical or different,

an N-(C_{1-4}-alkyl)-N-(C_{2-4}-alkyl)-amino group wherein the C_{2-4}-alkyl moiety is substituted in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, where

R_5 denotes a hydroxy, C_{1-4}-alkoxy or di-(C_{1-4}-alkyl)-amino group,

a di-(C_{2-4}-alkyl)-amino group wherein the two C_{2-4}-alkyl moieties in each case are substituted in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, wherein the substituents may be identical or different and R_5 is as hereinbefore defined,

a C_{3-7}-cycloalkylamino or C_{3-7}-cycloalkyl-C_{1-3}-alkylamino group wherein in each case the nitrogen atom is substituted by a further C_{1-4}-alkyl group,

R_c denotes a C_{4-7}-cycloalkoxy or C_{3-7}-cycloalkyl-C_{1-6}-alkoxy group wherein the cycloalkyl moiety in each case may be substituted by a C_{1-3}-alkyl, hydroxy, C_{1-4}-alkoxy, di-(C_{1-4}-alkyl)-amino, hydroxy-C_{1-2}-alkyl, C_{1-4}-alkoxy-C_{1-2}-alkyl, or di-(C_{1-4}-alkyl)-amino-C_{1-2}-alkyl group, whilst the abovementioned monosubstituted cycloalkyl moieties may additionally be substituted by a C_{1-3}-alkyl group, , whilst

by the aryl moieties mentioned in the definition of the abovementioned groups is meant a phenyl group which may in each case be monosubstituted by R_7, mono-, di- or trisubstituted by R_8 or monosubstituted by R_7 and additionally mono- or disubstituted by R_8, wherein the substituents may be identical or different and

R_7 denotes a cyano, carboxy, C_{1-4}-alkoxycarbonyl, aminocarbonyl, C_{1-4}-alkylaminocarbonyl, di-(C_{1-4}-alkyl)-aminocarbonyl, C_{1-4}-alkylsulfenyl, C_{1-4}-alkylsulfinyl, C_{1-4}-alkylsulfonyl, hydroxy, C_{1-4}-alkylsulfonyloxy, trifluoromethyloxy, nitro, amino, C_{1-4}-alkylamino, di-(C_{1-4}-alkyl)-amino, C_{1-4}-alkyl-carbonylamino, N-(C_{1-4}-alkyl)-C_{1-4}-alkylcarbonylamino, C_{1-4}-alkylsulfonylamino,

N-(C_{1-4}-alkyl)-C_{1-4}-alkylsulfonylamino, aminosulfonyl, C_{1-4}-alkylaminosulfonyl or di-(C_{1-4}-alkyl)-aminosulfonyl group, and

R_8 denotes a fluorine, chlorine, bromine or iodine atom, a C_{1-4}-alkyl, trifluoromethyl or C_{1-4}-alkoxy group or

two groups R_8, if they are bound to adjacent carbon atoms, together denote a C_{3-5}-alkylene or 1,3-butadien-1,4-ylene group,

or the tautomers, or stereoisomers or pharmaceutically acceptable salts thereof.

Claim 16 (previously presented) The quinazoline of formula I according to claim 14, wherein

R_a denotes a hydrogen atom,

R_b denotes a phenyl, benzyl or 1-phenylethyl group wherein the phenyl nucleus is substituted in each case by the groups R_1 and R_2, where

R_1 and R_2, which may be identical or different, in each case denote a hydrogen, fluorine, chlorine or bromine atom,

a methyl, trifluoromethyl or methoxy group,

X denotes a nitrogen atom,

A denotes an imino group,

B denotes a carbonyl group,

C denotes a-CH=CH- group,

an -C≡C- or -CH=CH-CH=CH- group,

D denotes a C_{1-4}-alkylene group,

E denotes a di-(C_{1-4}-alkyl)-amino group wherein the alkyl moieties may be identical or different,

an N-(C_{1-4}-alkyl)-N-(C_{2-4}-alkyl)-amino group wherein the C_{2-4}-alkyl moiety is substituted in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, whilst

R_5 denotes a hydroxy, C_{1-3}-alkoxy or di-(C_{1-3}-alkyl)-amino group,

a di-(C_{2-4}-alkyl)-amino group wherein the two C_{2-4}-alkyl moieties in each case are substituted in β-, γ-, or δ-position with regard to the nitrogen atom of the amino group by the group R_5, wherein the substituents may be identical or different and R_5 is as hereinbefore defined,

a C_{3-5}-cycloalkylamino or C_{3-5}-cycloalkyl-C_{1-3}-alkylamino group wherein in each case the nitrogen atom is substituted by a further C_{1-3}-alkyl group,

R_c denotes a C_{4-7}-cycloalkoxy or C_{3-7}-cycloalkyl-C_{1-4}-alkoxy group wherein the cycloalkyl moiety in each case may be substituted by a C_{1-3}-alkyl or C_{1-3}-alkoxy group, or the tautomers, or stereoisomers or pharmaceutically acceptable salts thereof.

Claim 17 (previously presented) The quinazoline of formula I according to claim 14, wherein

R_a denotes a hydrogen atom,

R_b denotes a phenyl, benzyl or 1-phenylethyl group, whilst the phenyl nucleus is substituted in each case by the radicals R_1 and R_2, whilst

R_1 and R_2, which may be identical or different, each denotes a hydrogen, fluorine, chlorine or bromine atom,

X denotes a nitrogen atom,

A denotes an imino group,

B denotes a carbonyl group,

C denotes a -CH=CH-, -C≡C- or-CH=CH-CH=CH- group,

D denotes an C_{1-3}-alkylene group,

E denotes a di-(C_{1-4}-alkyl)-amino group, wherein the alkyl moieties may be identical or different,

a methylamino or ethylamino group each substituted at the nitrogen atom by a 2-methoxy-ethyl, 1-methoxy-2-propyl, 2-methoxypropyl, 3-methoxypropyl, cyclopropyl or cyclopropylmethyl group,

a bis-(2-methoxyethyl)amino group,

R_c denotes a cyclopropylmethoxy, cyclobutylmethoxy, cyclopentylmethoxy or cyclohexylmethoxy group,

a cyclobutyloxy, cyclopentyloxy or cyclohexyloxy group,
or the tautomers, or stereoisomers or pharmaceutically acceptable salts thereof.

Claim 18 (previously presented) The quinazoline of formula I according to claim 14, wherein

R_a denotes a hydrogen atom,

R_b denotes a 1-phenylethyl group or a phenyl group wherein the phenyl nucleus is substituted by the radicals R_1 and R_2, whilst

R_1 and R_2, which may be identical or different, each denote a hydrogen, fluorine, chlorine or bromine atom,

X denotes a nitrogen atom,

A denotes an imino group,

B denotes a carbonyl group,

C denotes a -CH=CH-, -C≡C- or -CH=CH-CH=CH- group,

D denotes a methylene group,

E denotes a dimethylamino, diethylamino, Bis(2-methoxyethyl)amino, *N*-methyl-*N*-(2-methoxyethyl)amino, *N*-ethyl-*N*-(2-methoxyethyl)amino, *N*-methyl-*N*-cyclopropylamino, *N*-methyl-*N*-cyclopropylmethyl-amino, *N*-methyl-*N*-(1-methoxy-2-propyl)amino, *N*-methyl-*N*-(2-methoxypropyl)amino or *N*-methyl-*N*-(3-methoxypropyl)amino group,

R_c denotes a cyclopropylmethoxy, cyclobutyloxy or cyclopentyloxy group,

or the tautomers, or stereoisomers or pharmaceutically acceptable salts thereof.

Claim 19 (previously presented) The following compound of general formula I according to claim 14:

4-[(3-Chloro-4-fluorophenyl)amino]-6-{[4-(*N*,*N*-diethylamino)-1-oxo-2-buten-1-yl]amino}-7-cyclopropylmethoxyquinazoline

or a pharmaceutically acceptable salt thereof.

Claim 20 (previously presented) The physiologically acceptable salt of a compound according to one of claims 14 to 19 with an inorganic or organic acid or base.

Claim 21 (previously presented) A pharmaceutical composition comprising a compound according to claim 20, together with an inert carrier and with or without a diluent.

Claim 22 (previously presented) A method for treating a disease comprising administering a pharmaceutical composition according to claim 21, wherein said disease is selected from the group consisting of: malignant tumors, diseases of the airways and lungs and diseases of the gastrointestinal tract and the bile duct and gall bladder.